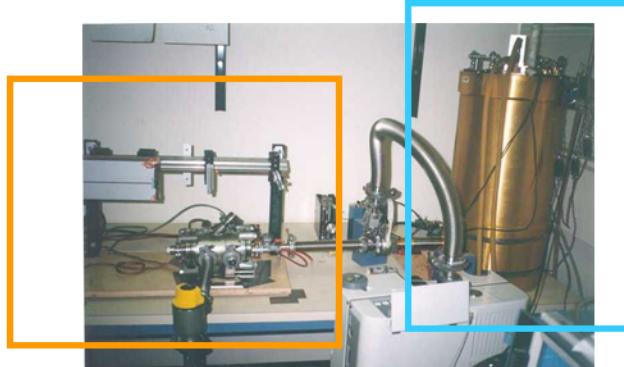


## R&D prototype 1998

MALDI TOF from Neuchâtel

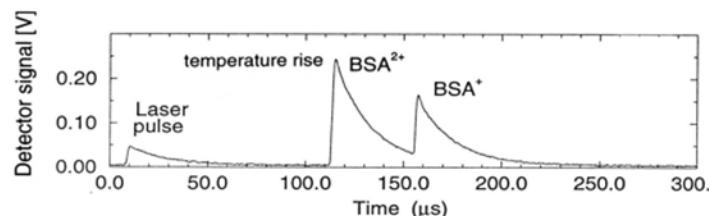
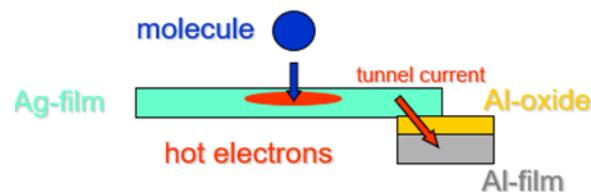


ADR cryostat  
from NIST (Boulder)

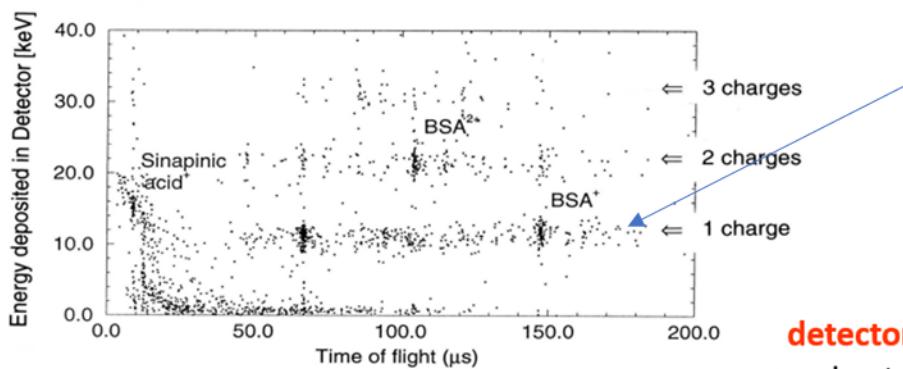
collaboration (1998)

- NIST (Boulder)
- Institut Physique, Neuchâtel
- GenSpec SA

200  $\mu\text{m} \times 200 \mu\text{m}$   
microcalorimeter  
operated at 100 mK



mass BSA : 66 kDa



every dot is a  
single molecule

detector signal = “temperature rise”  
owing to absorbed kinetic energy of  
accelerated molecule in MALDI-TOF  
mass spectrometer

no mass limit !

G.Hilton,J.M.Martinis,D.A.Wollmann,K.D.Irwin,L.L.Dulcie, D.Gerber,P.M.Gillevet  
& D.Twerenbold, Nature, Vol 391, page 672, 12.February 1998